

PATENT  
Docket No. 58614US002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): OXMAN et al. ) Group Art Unit: 3732  
Serial No.: 10/643,748 ) Examiner: John J. Wilson  
Confirmation No.: 4133 )  
Filed: August 19, 2003 )  
For: DENTAL ARTICLE FORMS AND METHODS

**REPLY BRIEF**  
**IN RESPONSE TO**  
**EXAMINER'S ANSWER DATED AUGUST 31, 2009**

Commissioner for Patents  
Mail Stop Appeal Brief - Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

The present Appeal was filed June 4, 2008, from the final rejection of claims 39 and 42-71 of the above-identified application under 37 C.F.R. §§1.113 and 1.191. This Reply Brief is in response to the Examiner's Answer dated August 31, 2009.<sup>1</sup> For the convenience of the Board and for clarity of the record, this Reply Brief includes all of the arguments presented in Applicant's Reply Brief of November 3, 2008. Herein, Appellants also present some additional points of clarification.

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<sup>1</sup> For clarification, Applicants present a brief summary of the procedural history leading up to the present Reply Brief: Appellants submitted an Appeal Brief dated June 16, 2008. In response, the Examiner submitted the Examiner's Answer dated September 2, 2008. In response to the Answer, Appellants submitted a Reply Brief dated November 3, 2008. The Board then vacated the Examiner's Answer by an order dated June 3, 2009. The Examiner subsequently submitted an amended Examiner's Answer dated August 31, 2009.

Appellants present the following remarks in response to the Examiner's Answer dated August 31, 2009 for consideration by the Board in its review of this appeal and continue to request that the Board reverse the obviousness rejections of claims 39 and 42-71.

At page 8 of the Examiner's Answer, the Examiner stated:

Appellant further argues that the cement taught by Simor is not a hardenable material that forms a dental article upon removal of the form that shapes the dental article. This argument is pointing out the difference between Simor and the present invention, that the form 10, Fig. 5, of Simor remains on the filling material 27, Fig. 9, and therefore, the cement 27 of Simor is not a hardenable material that forms the dental article.

This is not entirely clear, but to the extent Appellants understand the Examiner's intent, the following is offered to clarify Appellant's argument. Appellants actually argued in the Appeal Brief that the cement 27 of Simor is not a hardenable material that forms the dental article upon removal of a form that shapes the dental article, for at least the reason that Simor fails to disclose removal of a form that shapes a dental article. Thus, cement 27 of Simor cannot be the presently recited hardenable material.

At page 8 of the Examiner's Answer, the Examiner stated:

This argument is disagreed with because the claim language calls for filing the reservoir with hardenable dental material which is clearly shown in Fig. 9 of Simor, cement being a hardenable dental material, and shows after filing the reservoir, the dental article "form" is reshaped, (note: appellant is arguing that the material is reshaped after the form is removed, however, as claimed in the last two lines of claim 39, it is the form that is reshaped[D]). . . . Also, with respect to the step of removing the dental article form from the article, the claims do not give any specific chronology with respect to the other steps in the claims, . . .

This is not entirely clear, but to the extent Appellants understand the Examiner's intent, the following is offered to clarify the claim language. It is submitted that Appellants' claim language (e.g., as recited in claim 39) "wherein the dental article form is reshaped while in the subject's mouth after filling the reservoir with the hardenable dental material" clearly indicates

that the form is reshaped after filling it, therefore, the hardenable dental material within the reservoir is inherently also reshaped along with the form. Also, simply because this “wherein the dental article form is reshaped” clause is physically placed in the claim after the step of “removing the dental article form from the article” does not mean that this “reshaping” step occurs after the “removing” step. It is clear from reading the entire claim (e.g., as recited in claim 39) that the “removing” step occurs after the dental article is formed. This cannot occur until after the reservoir of the dental article form is filled with the hardenable dental material, and the dental article form is reshaped while in the subject’s mouth after filling the reservoir with the hardenable dental material. Also, Appellants again submit that a dental cement is not a hardenable dental material that forms a dental article upon removal of a form that shapes the dental article, particularly (as recited in claim 67) a dental article selected from the group consisting of a crown, an inlay, an onlay, a bridge, an orthodontic appliance, a maxillofacial prosthesis, and a tooth splint. Further, Wilson (relied upon by the Examiner for a disclosure of removing the dental article form from the dental article), at column 4, lines 8-24, refers to reshaping the composite material remaining after removal of the crown form, and therefore does not disclose “wherein the dental article form is reshaped” (e.g., claim 39; emphasis added).

At page 8 of the Examiner’s Answer, the Examiner stated: “Simor is held to properly show in Fig. 9, reshaping the dental article form 10, and further, also shows the reshaping the hardenable dental material within the form.” Appellants earnestly disagree. Simor’s Fig. 9 does not show reshaping of crown 10 or any dental article form. As explained by Simor at column 5, lines 62-74:

By one procedure that may be followed, the first step is to press the crown 10 onto the tooth 21 to the position indicated in phantom lines in FIG. 8. This preferably is accomplished through the biting of the patient to force 65 the crown onto the prepared tooth 21 by the opposing tooth 25, as indicated in FIG. 9. This locates the crown at the desired height relative to the teeth for the final attachment of the crown. At that position, the crown 10 is in proper relationship with the other teeth of the 70 patient. In the example shown, the cervix 17 of the crown is approximately at the finish line 26 of the tooth preparation, which is, in turn, usually around the cemento-enamel junction.

Thus, crown 10 is pressed onto the tooth 21, which may be accomplished through biting of the patient. Although this procedure may reshape cement 27 and may locate or position the height of crown 10, it is submitted that crown 10 is not reshaped in Fig. 9 of Simor, as alleged by the Examiner. For at least this reason, Fig. 9 may not serve as a basis for the Examiner's erroneous allegation that Simor discloses reshaping a dental article form (e.g., claim 39).

At page 9 of the Examiner's Answer, the Examiner stated: "The argument is disagreed with because, with respect to self-supporting, it is noted that in the actual claim language this is used to limit the dental article form, see first three lines of claim 39, and is not specific to the organic composition itself, . . ." This is not entirely clear, but to the extent Appellants' understand the Examiner's intent, the following is offered to clarify the claim language. It is submitted that the self-supporting language is not simply used to "limit the dental article form"; rather, claim 39 (lines 5-7), for example, clearly recites "wherein the organic composition gives the self-supporting structure its self-supporting and malleable characteristics, and further wherein the organic composition is dimensionally stable . . ." Thus, the claim language is clear that the organic composition itself is self-supporting and malleable.

**Summary**

For the foregoing reasons, Appellants respectfully request that the Board review and reverse the rejections of claims 39 and 42-71 and that notification of the allowance of these claims be issued.

Respectfully submitted  
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October 23, 2009  
Date

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**CERTIFICATE UNDER 37 CFR §1.8:**

The undersigned hereby certifies that this paper is being transmitted via the U.S. Patent and Trademark Office electronic filing system in accordance with 37 CFR §1.6(a)(4) to the Patent and Trademark Office addressed to the Commissioner for Patents, Mail Stop **Appeal Brief - Patents**, P.O. Box 1450, Alexandria, VA 22313-1450, on this 23<sup>rd</sup> day of October, 2009.

By: Dawn Monroe  
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